



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,878	01/25/2002	Gordhanbhai N. Patel	PATL 3. 0-012/PCT/US	1198

7590

10/07/2005

OMRI M. BEHR  
325 PIERSON AVENUE  
EDISON, NJ 08837-3123

EXAMINER
----------

CROSS, LATOYA I

ART UNIT	PAPER NUMBER
----------	--------------

1743

DATE MAILED: 10/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/031,878

Applicant(s)

PATEL, GORDHANBHAI N.

Examiner

LaToya I. Cross

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 40-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 40-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 30, 2005 has been entered.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 6-11, 40-49 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 4,094,642 to Sumimoto et al.

Sumimoto et al teach an indicator device for ethylene oxide gas. The device comprises an indicator composition having a polymer, a coloring agent, and an activator. The polymer is preferably nitrocellulose. Other polymers, including vinyl chloride and vinyl acetate were also used (col. 2, lines 24-36; col. 3, lines 56-69). The coloring agent is preferably a blue coloring agent (col. 3, lines 6-21).

Art Unit: 1743

The activator is a basic substance such as sodium carbonate having a monovalent cation and an anion (col. 2, lines 45-54). Example 1 teaches all of the components dissolved in a solvent (ethyl acetate).

Sumimoto et al teach that when the composition is exposed to ethylene oxide gas, an observable color forms. With respect to the method of claims 40-45, Sumimoto et al teach that the indicator composition is prepared and applied to a packaging bag. The packaging bag having the indicator is exposed to sterilization gas mixture having ethylene oxide. After exposure, an observable color change from blue to green formed. See Example 1.

3. Claims 1-3 and 5-7 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6,287,518 to Ignacio et al.

Ignacio et al teach sterilization monitoring devices. The device comprise a dye, a halogen source and a binder resin. The dye is a pH sensitive dye that, when exposed to sterilant, will produce a color change from yellow to blue, for example (see Example 2). The halogen source is a compound such as an alkali metal halide salt (potassium bromide, for example). See col. 3, lines 31-39. The binder resin is a polymer such as cellulosic materials. The binder may be dissolved in water or solvent (col. 3, lines 40-53, lines 59-63).

It is noted that Ignacio et al do not disclose that the sterilization-monitoring device monitors ethylene oxide sterilization. However, since the claims are directed to the device itself, Applicants' intended use is not sufficiently limiting to constitute a patentable distinction because the device claims are limited only by their structural components. Thus, Applicants' claims are anticipated because Ignacio et al teach a sterilization indicator having the same structural features as those claimed.

***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Ignacio et al in view of US Patent 6,395,551 to Kipke et al.

The disclosure of Ignacio et al is described above. Ignacio et al fail to teach the particular dyes recited in claim 4 of the instant invention.

Kipke et al teach indicators for sterilization. As pH sensitive dyes, the reference discloses the dyes taught by Ignacio et al (fluorescein, phenolphthalein) and those claimed by Applicants (bromothymol blue, bromocresol purple). Thus, Kipke et al provides for the equivalency between those dyes claimed and those taught by Ignacio et al. It would have been obvious to one of ordinary skill in the art to substitute the dyes of Ignacio et al for others (such as bromothymol blue and bromocresol purple) known to be pH sensitive dyes for sterilization monitoring. Such a modification would provide an indicator that allows sterilization to be monitored by observing color changes, alleviating the need for costly equipment and highly trained users.

***Response to Arguments***

Applicant's arguments with respect to claims 1-11 and 40-45 have been considered but are not considered persuasive for the following reasons:

Applicants' claim amendments fail to limit the claim sufficiently to support patentability over the Sumimoto, Ignacio and Kipke references. Specifically, the instant claims now recite that the polymeric binder is one of acidic or neutral pH. Both the Sumimoto and Ignacio references teach the same polymeric binders as disclosed by Applicants. Thus, since the components of the compositions of

Art Unit: 1743

Sumimoto and Ignacio are the same as those instantly claimed, the properties must also be the same. See MPEP 2112.01. The same argument follows for Applicants' amendment to recite that the indicator is one that undergoes a color change upon rise in pH. The indicators instantly claimed are the same as those taught by Sumimoto and Ignacio. Thus, they are presumed to function in the same manner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaToya I. Cross whose telephone number is 571-272-1256. The examiner can normally be reached on Monday-Friday 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lic

  
**MONIQUE T. COLE**  
PRIMARY EXAMINER